

Response to Office Action dated February 4, 2008
U.S. Appl. No. 10/549,611
Atty. Docket No.: 8722.007.US0000

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IN THE CLAIMS:

Please cancel previous claims 1-30 and insert new claims 31-52 as follows:

31. (New) A process for production of an allyl and/or methallyl ether of a tri or polyhydric alcohol wherein said process comprises the steps of

i) subjecting at least one cyclic formal of at least one tri or polyhydric alcohol to allylation by reaction with at least one allyl halide and/or methallyl halide in presence of a catalytically effective amount of at least one basic catalyst, whereby a reaction mixture, comprising at least one allyl ether and/or methallyl ether of said cyclic formal, is yielded, and

ii) subjecting the yielded allyl and/or methallyl ether of said cyclic formal of step (i) to reaction with at least one alcohol, having one or more hydroxyl groups, optionally in presence of a catalytically effective amount of at least one organic acid catalyst, whereby a reaction mixture, comprising at least one allyl ether and/or methallyl ether of said tri or polyhydric alcohol and at least one formal of said alcohol, is yielded.

32. (New) The process according to claim 31, wherein said process further comprises an intermediate purification step wherein the reaction mixture obtained in step (i) is purified prior to initiation of step (ii).

33. (New) The process according to Claim 32, wherein said intermediate purification is at least one purification selected from the group consisting of extraction and evaporation.

34. (New) The process according to claim 31, wherein said process further comprises a final purification step wherein the reaction mixture obtained in step (ii) is purified.

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Atty. Docket No.: 8722.007.US0000

35. (New) The process according to claim 34, wherein said final purification step is an evaporation.

36. (New) The process according to claim 31, wherein said step (i) is performed at a temperature of 60-140°C.

37. (New) The process according to claim 31, wherein said step (ii) is performed at a temperature of 80-160°C.

38. (New) The process according to claim 31, wherein said at least one cyclic formal is at least one cyclic formal of a 1,2,3-propanetriol, a 2-alkyl-2-hydroxyalkyl-1,3-propanediol, a 2-alkyl-2-hydroxyalkoxy-1,3-propandiol, a 2-alkyl-2-hydroxyalkoxyalkyl-1,3-propanediol, a 2,2-dihydroxyalkyl-1,3-propanediol, a 2,2-dihydroxyalkoxy-1,3-propanediol, and a 2,2-dihydroxyalkoxyalkyl-1,3-propanediol.

39. (New) The process according to Claim 31, wherein said at least one cyclic formal is a cyclic formal of a dimer, a trimer or a polymer of a 1,2,3-propanetriol, a 2-alkyl-2-hydroxyalkyl-1,3-propanediol, a 2-alkyl-2hydroxyalkoxy-1,3-propanediol, a 2-alkyl-2-hydroxyalkoxy-1,3-propandiol, a 2,2-dihydroxyalkyl-1,3-propanediol, a 2,2-dihydroxyalkoxy-1,3-propanediol or a 2,2-dihydroxyalkoxyalkyl-1,3-propanediol.

40. (New) The process according to claim 31, wherein said at least one cyclic formal is a cyclic formal of glycerol, trimethylolethane, trimethylolpropane, diglycerol, ditrimethylolethane, ditrimethylolpropane, pentaerythritol or dipentaerythritol.

Response to Office Action dated February 4, 2008

U.S. Appl. No. 10/549,611

Atty. Docket No.: 8722.007.US0000

41. (New) The process according to claim 31, wherein said at least one cyclic formal is a cyclic formal of ethoxylated and/or propoxylated glycerol, an ethoxylated and/or propoxylated trimethylolethane, an ethoxylated and/or propoxylated trimethylolpropane, an ethoxylated and/or propoxylated diglycerol, an ethoxylated and/or propoxylated ditrimethylolethane, an ethoxylated and/or propoxylated ditrimethylolpropane, an ethoxylated and/or propoxylated pentaerythritol or an ethoxylated and/or propoxylated dipentaerythritol.

42. (New) The process according to claim 32, wherein said at least one cyclic formal is a 4-hydroxyalkyl-1,3-dioxolane, 5-hydroxy-1,3-dioxane, 5-hydroxy-1,3-dioxane, 5-alkyl-5-hydroxy-1,3-dioxane, 5-alkyl-5-hydroxyalkyl-1,3-dioxane or 5,5-hydroxy-alkyl-1,3-dioxane.

43. (New) The process according to claim 42, wherein at least one cyclic formal is 5-hydroxy-1,3-dioxane, 5-methyl-5-hydroxymethyl-1,3-dioxane, 5-ethyl-5-hydroxymethyl-1,3-dioxane or 5,5-dihydroxymethyl-1,3-dioxane.

44. (New) The process according to claim 31, wherein said at least one allyl halide and/or methallyl halide is allyl bromide, ally chloride, methallyl bromide and/or methallyl chloride

45. (New) The process according to claim 31, wherein said at least one basic catalyst is an alkali metal hydroxide, an alkali metal alkoxide, an alkaline metal carbonate, an alkaline earth metal hydroxide, an alkaline earth metal alkoxide and/or an alkaline earth metal carbonate.

46. (New) The process according to claim 45, wherein said at least one basic catalyst is potassium hydroxide, potassium carbonate, potassium methoxide, sodium hydroxide, sodium carbonate and/or sodium methoxide.

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47. (New) The process according to claim 31, wherein said at least one alcohol, having an one or more hydroxyl groups, is a mono, di, tri or polyalcohol.

48. (New) The process according to claim 47, wherein said mono, di, tri or polyalcohol is an alkanol, an alkanediol, a 2,2-alkyl-1,3-propanediol, a 2-alkyl-2-hydroxyalkyl-1,3-propanediol, a 2,2-dihydroxyalkyl-1,3-propanediol or a dimer, a trimer, or polymer of said alcohol.

49. (New) The process according to claim 47, wherein said mono, di, tri or polyalcohol is methanol, 2-ethylhexanediol, ethylene glycol, neopentyl glycol, trimethylolpropane and/or trimethylolethane.

50. (New) The process according to claim 48, wherein said mono, di, tri or polyalcohol is methanol, 2-ethylhexanediol, ethylene glycol, neopentyl glycol, trimethylolpropane and/or trimethylolethane.

51. (New) The process according to claim 31, wherein said at least one organic acid catalyst is *p*-toluenesulphonic acid or methanesulphonic acid.

52. (New) The process according to claim 31, wherein said at least one cyclic formal subjected to allylation in step (i) is 5,5-dihydroxymethyl-1,3-dioxane and wherein said alcohol, which in step (ii) is subjected to reaction within step (i) yielded allyl ether and/or methallyl ether, is trimethylolpropane.